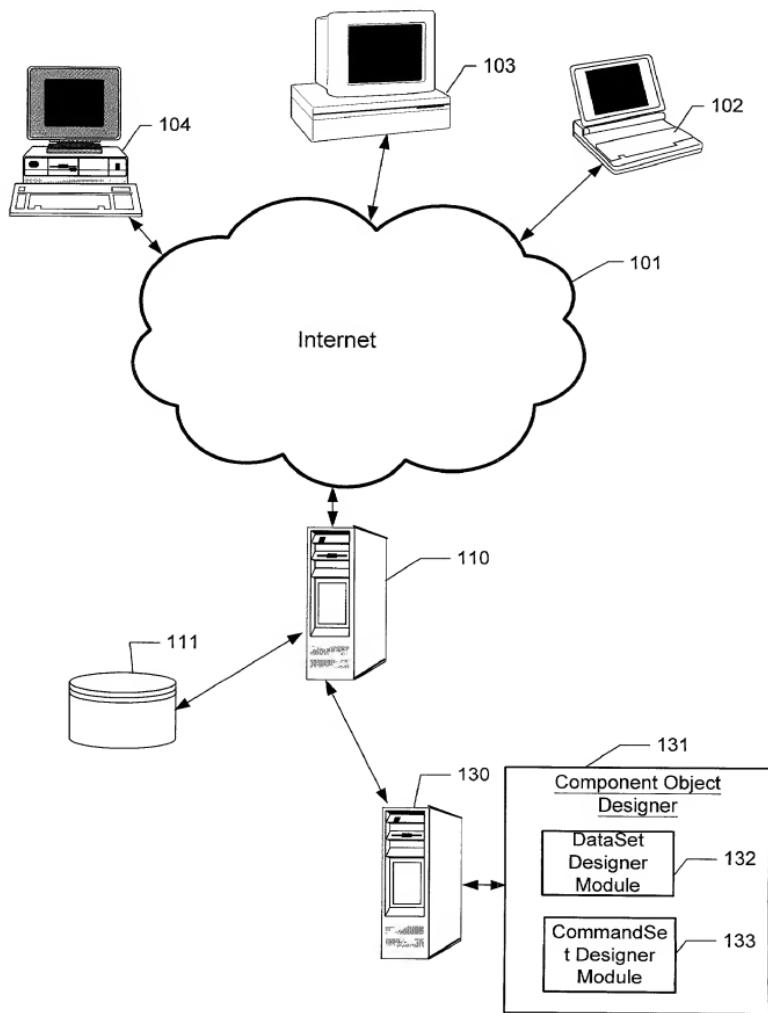
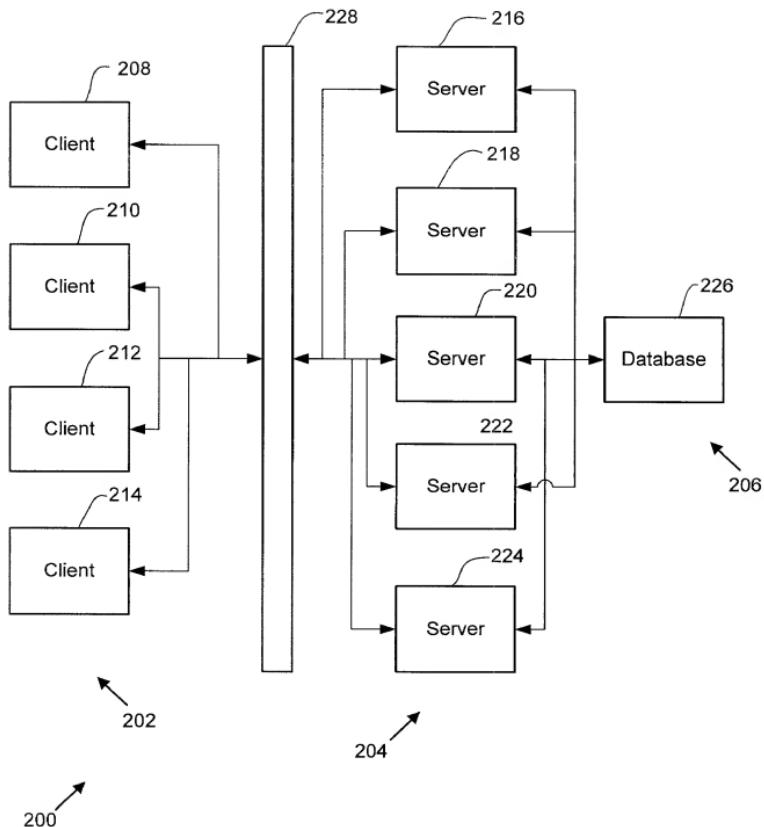
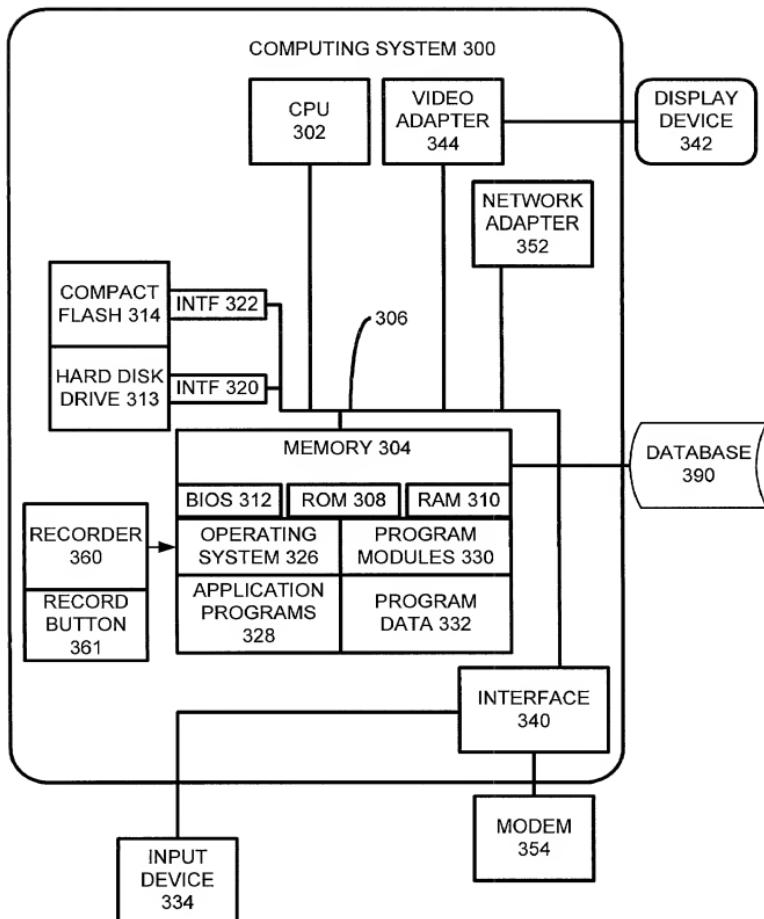


**FIG. 1**

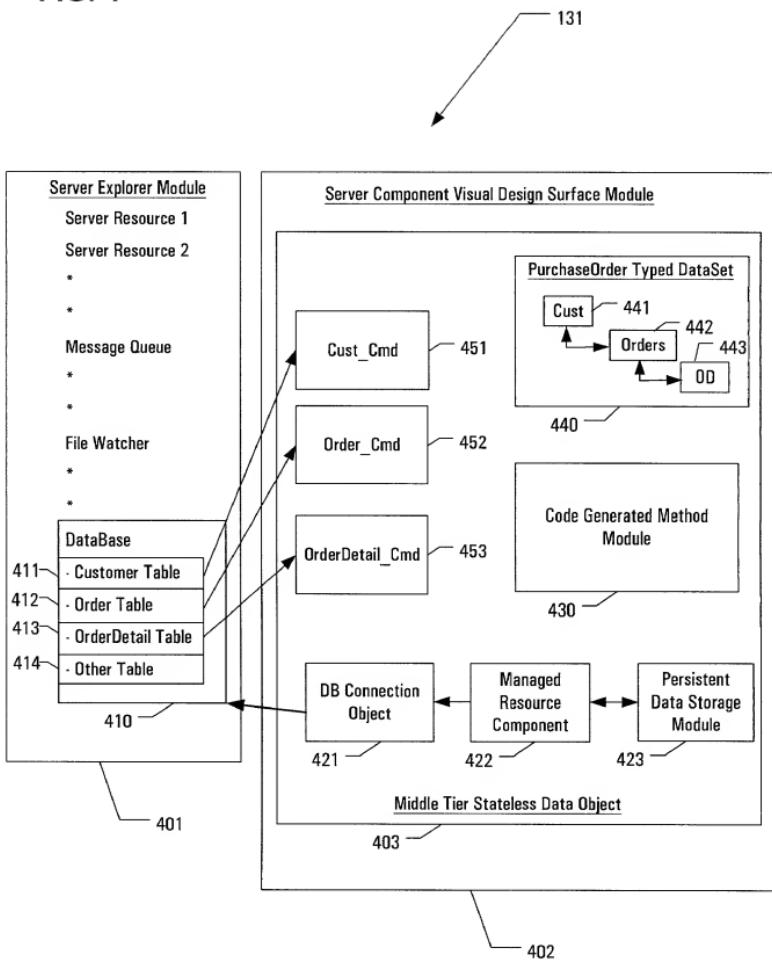
**FIG. 2**



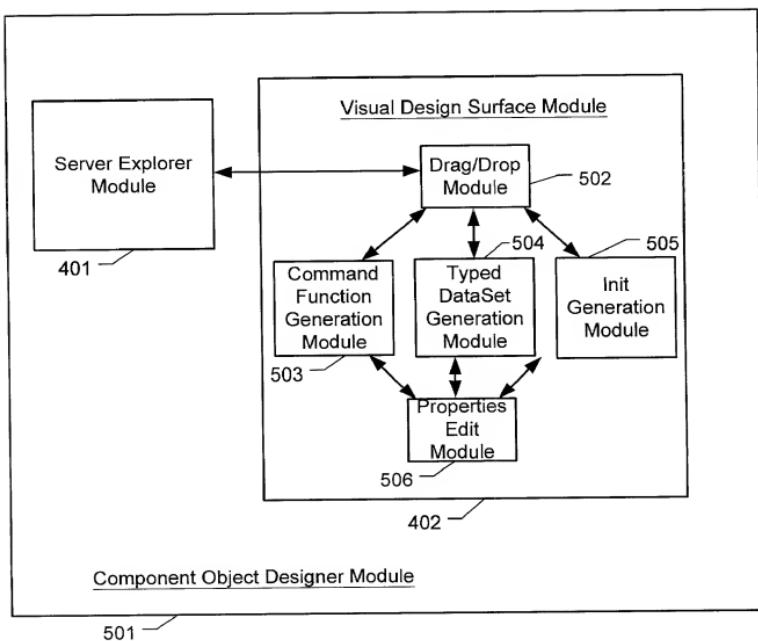
**FIG. 3**



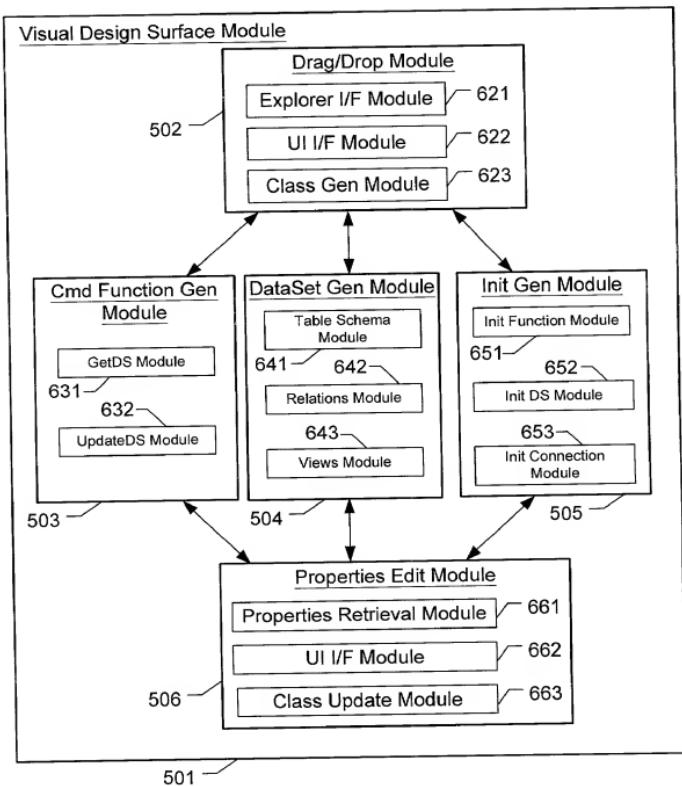
**FIG. 4**



**FIG. 5**



**FIG. 6**



**FIG. 7a**

### **FillDataSet Method**

```
Public Function XXXXFillDataSet( ByVal dataSet As DataSet {, ByVal  
{ParameterName} As System.{ParameterType}}) As Long
```

```
' Copy input Parameter Values to the Parameter Collection
```

```
    DIM vtParameter As Variant
```

```
    vtParameter1 = {ParameterName}
```

```
    Set
```

```
{Adapterinstance}.SelectCommand.Parameters.Item(ParameterName).Value=vtParamet  
er1
```

```
'Create an error handling block in case filldataset throws an exception
```

```
    Try
```

```
'Load dataSet from the command
```

```
    XXXXXFillDataSet = {Adapterinstance}.FillDataSet(dataset)
```

```
    Catch eFillException as Exception
```

```
        'if we can do a debug.print without a reference, then we should print the
```

```
        'error info to the output window and re-throw the error.
```

```
    End
```

```
End Function
```

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## **FIG. 7b      UpdateDataSet Method**

```
Public Function XXXXUodateDataSet (ByVal updateDataSet As DataSet) As Long
```

```
    const DataCursorRowState flag = DataCursorRowState.new |  
DataCursorRowState.Deleted | DataCursorRowState.ModifiedCurrent;  
    DataRow[] datarows = dataTable.Select(" ", " ", flag);  
  
    Dim UpdateRows as DataRows()  
    Dim NewRows as DataRows()  
    Dim DeletedRows as DataRows()  
  
    ' Get All of the Deleted Rows and Update the Data Store  
    DeletedRows = UpdateDataSet.Select(" ", " ", DataCursorRowState.Deleted)  
    If 0 < dataRowLength then  
        Update(DeletedRows, AdapterInstance.DefaultSourceTableName);  
    End If  
  
    ' Get All of the Updates Rows and Update the Data Store  
    UpdatedRows = UpdateDataSet.Select(" ", " ",  
DataCursorRowState.ModifiedCurrent)  
    If 0 < dataRowLength then  
        Update(DeletedRows, AdapterInstance.DefaultSourceTableName);  
    End If  
  
    ' Get All of the New Rows and Update the Data Store  
    NewRows = UpdateDataSet.Select(" ", " ", DataCursorRowState.New)  
    If 0 < dataRowLength then  
        Update(DeletedRows, AdapterInstance.DefaultSourceTableName);  
    End If  
  
End Function
```



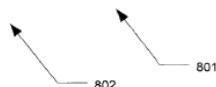
**FIG. 8a**

FillAllDataSet

```
Public Sub FillAllDataSet(ByVal dataset As DataSet, ByVal Parameters As  
System.{ParameterType})
```

```
' The line below is added for each adapter on the Virtual Design Surface  
' Passing into the function only the necessary parameters  
(AdapterName1)FillDataSet dataset{, _parameters}  
(AdapterName2)FillDataSet dataset{, _parameters}  
*  
*  
*  
(AdapterNameN)FillDataSet dataset{, _parameters}
```

```
End Sub
```



**FIG. 8b**

UpdateAllDataSet

```
Public Sub Update{DataSetName} (ByVal dataset As DataSet)
```

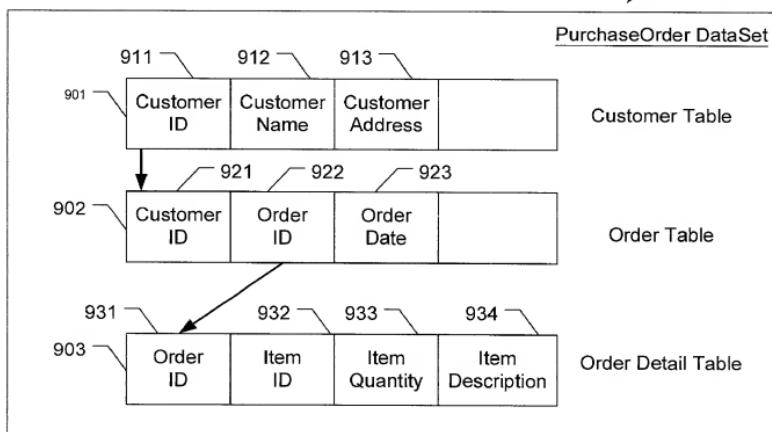
```
' The line below is added for each adapter on the Virtual Design Surface
```

```
(AdapterName1)Update dataSet  
(AdapterName2)Update dataSet  
*  
*  
*  
(AdapterNameN)Update dataSet
```

```
End Sub
```



**FIG. 9**



```
Public Sub FillAllDataSet(ByVal PurchaseOrder As DataSet, ByVal Parameters As System.{ParameterType})
```

```
    CustomerFillDataSet PurchaseOrder, _parameters)
```

```
    OrderFillDataSet PurchaseOrder, _parameters}
```

```
    OrderDetailFillDataSet PurchaseOrder, _parameters}
```

941

```
End Sub
```

```
Public Sub UpdateAll (ByVal PurchaseOrder As DataSet)
```

' The line below is added for each adapter on the Virtual Design Surface

```
    OrderDetailUpdate (PurchaseOrder, Filtered (Delete))
```

```
    OrderUpdate (PurchaseOrder, Filtered (Delete))
```

```
    CustomerUpdate (PurchaseOrder, Filtered (Delete))
```

943

' The line below is added for each adapter on the Virtual Design Surface

```
    OrderDetailUpdate (PurchaseOrder, Filtered (Insert | Update))
```

```
    OrderUpdate (PurchaseOrder, Filtered (Insert | Update))
```

```
    CustomerUpdate (PurchaseOrder, Filtered (Insert | Update))
```

944

```
End Sub
```

**FIG. 10**

